

The Great Debate:

The Construction Schedule

CPM as Tool ... or Sword and Shield?
Owner versus Contractor



Construction CPM Conference
Orlando, Florida
January 11th, 2017

INTRODUCTION & OUTLINE

Owner's Representative
John Orr, PSP
URS / AECOM
Senior Scheduler

Contractor's Representative
Jeff Milo, PSP
Brasfield & Gorrie
Sr. Planner / Scheduler



The Great Debate
Owner vs. Contractor

INTRODUCTION & OUTLINE

Owner's Representative
John Orr, PSP
URS / AECOM
Senior Scheduler

Contractor's Representative
Jeff Milo, PSP
Brasfield & Gorrie
Sr. Planner / Scheduler



The Great Debate
Owner vs. Contractor

INTRODUCTION & OUTLINE

Owner's Representative
John Orr, PSP

Contractor's Representative
Jeff Milo, PSP

The Third Law of Schedule Dynamics:
For every PSP, there is an equal and opposite PSP

OUTLINE

- Shared Goals in Scheduling
- The Owner Writes the Schedule Specifications
- The Contractor Hires the Scheduler
- The Baseline Schedule Review
- Cost & Resource Loading Issues
- The Schedule Updating Process
- Construction Delays and Schedule Changes
- Substantial Completion
- Conclusions

SHARED GOALS IN SCHEDULING

- Confidence in the projected completion date
- The entire project scope is included in the schedule
- Reflects the contractor's project planning for construction
- Tool for managing and coordinating the work
- Framework for analysis of impacts from unexpected events
- Cost loading to facilitate progress payments

THE OWNER WRITES THE CONTRACT SCHEDULING SPECIFICATIONS

YOU SIGNED IT; NOW DEAL WITH IT !

THE OWNER WRITES THE CONTRACT SCHEDULING SPECIFICATIONS

- The schedule requirements should be current and reasonable, based on the needs of the project
- The baseline should include a “Basis of Schedule” narrative to explain the planning, execution and (sub)contracting strategy, and the schedule’s development

THE CONTRACTOR HIRES THE SCHEDULER

WHO BUILT THIS MESS, ANYWAY?

THE CONTRACTOR HIRES
THE SCHEDULER

- The bid documents should describe the requirements of the schedule ... and of the scheduler!

THE BASELINE SCHEDULE REVIEW

OH, DARLING, ITS OUR FIRST FIGHT !

THE BASELINE SCHEDULE REVIEW

- The Schedule Matches the Contract Performance Period
- Reasonable Critical Path and Levels of Float
- Schedule Contingency
- An Appropriate Level of Detail
- Inclusion of All Trades, and their Correct Sequencing and Handoffs

OH, DARLING, ITS OUR FIRST FIGHT !

THE BASELINE SCHEDULE REVIEW

- Float should be a shared resource, to be properly used by the first party that needs it
- Schedule Contingency must be defined, determined (risk), placed and managed, not just added to activity durations as “padding”

COST & RESOURCE LOADING

SHOW ME THE MONEY !

COST & RESOURCE LOADING

- Front-end Cost Loading
- Resource Loading

SCHEDULE PROGRESS UPDATES

WHERE ARE WE???

SCHEDULE PROGRESS UPDATES

- Schedules Measure Time, not Dollars

CONSTRUCTION DELAYS

CHANGE HAPPENS !

CONSTRUCTION DELAYS

- Construction Delays
- Other Working Schedules
- No-Fault Scheduling



SUBSTANTIAL COMPLETION

ARE WE THERE YET ?

SUBSTANTIAL COMPLETION

- The Importance of the Back End of the Schedule

CONCLUSIONS ?

CONCLUSIONS.

- What Owners Need to Remember About Contractors
- What Contractors Need to Remember About Owners

QUESTIONS?

The logo for AECOM, featuring the letters 'A', 'E', and 'C' in a stylized, bold font. The 'E' is composed of three horizontal bars, with the top bar in black, the middle bar in blue, and the bottom bar in green. The letters 'A' and 'C' are black, and 'COM' is also black.The logo for BRASFIELD & GORRIE GENERAL CONTRACTORS. 'BRASFIELD' is in a bold, blue, serif font. Below it is a large, blue, decorative ampersand '&'. To the right of the ampersand, 'GORRIE' is in the same bold, blue, serif font. Below 'GORRIE', the words 'GENERAL CONTRACTORS' are written in a smaller, blue, sans-serif font.The logo for the Construction CPM Conference. It features the word 'Construction' in a black, serif font at the top. Below it is a stylized icon of a construction crane. To the right of the crane icon are the letters 'CPM' in a large, bold, black, sans-serif font. At the bottom, the word 'Conference' is written in a black, serif font.

The Great Debate
Owner vs. Contractor